

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the present application:

**Listing of Claims:**

1. (ORIGINAL) A tissue scaffold which comprises a matrix comprising a solid or semi solid first phase and, contained within and distributed through the first phase, a second phase which optionally additionally contains cells, and wherein the matrix has a porous structure.
2. (ORIGINAL) A tissue scaffold according to claim 1, wherein the second phase is solid.
3. (ORIGINAL) A tissue scaffold according to claim 2, wherein the second phase comprises a solid particle material contained within and distributed through the first phase.
4. (ORIGINAL) A tissue scaffold according to claim 3, wherein the solid particulate material is porous.
5. (ORIGINAL) A tissue scaffold according to claim 1 wherein the first phase or the second phase or both the first phase and the second phase comprises one or more of the polymers selected from poly ( $\alpha$ -hydroxyacids), polylactic or polyglycolic acids, poly-

lactide poly-glycolide copolymers, poly-lactide polyethylene glycol (PEG) copolymers, polyesters, poly ( $\epsilon$ -caprolactone), poly (3-hydroxy-butyrate), poly (s-caproic acid), poly (p-dioxanone), poly (propylene fumarate), poly (ortho esters), polyol/diketene acetals addition polymers, polyanhydrides, poly (sebacic anhydride) (PSA), poly (carboxybiscarboxyphenoxyphenoxyhexane) (PCPP), poly [bis(p $\gamma$ -carboxyphenoxy) methane] (PCPM), copolymers of SA, CPP and CPM poly (amino acids), poly (pseudo amino acids), polyphosphazenes, derivatives of poly [(dichloro) phosphazene], poly [(organo) phosphazenes] polymers, polyphosphates, polyethylene glycol polypropylene block copolymers, natural polymers, silk, elastin, chitin, chitosan, fibrin, fibrinogen, polysaccharides (including pectins), alginates, collagen, poly (amino acids), peptides, polypeptides or proteins, co-polymers prepared from the monomers of these polymers random blends of these polymers or mixtures or combinations thereof.

6. (ORIGINAL) A tissue scaffold according to claim 5, wherein the polymer is biodegradable.

7. (ORIGINAL) A tissue scaffold according to claim 5, wherein the polymer is crosslinked.

8. (ORIGINAL) A tissue scaffold according to claim 5, wherein the first phase or the second phase or both the first phase and the second phase comprises a polymer and a plasticizer.

9. (ORIGINAL) A tissue scaffold according to claim 1, which additionally contains cells.

10. (ORIGINAL) A tissue scaffold according to claim 9, wherein the cells are provided in the second phase.

11. (ORIGINAL) A tissue scaffold according to claim 9, in which the cells are animal cells.

12. (ORIGINAL) A tissue scaffold according to claim 11, in which the cells are mammalian cells.

13. (ORIGINAL) A tissue scaffold according to claim 11, in which the cells are human cells.

14. (ORIGINAL) A tissue scaffold according to claim 11, in which the cells are bone, osteoprogenitor cells, cardiovascular cells, endothelial cells, cardiomyocytes, pulmonary or other lung cells, gut or intestinal cells, cartilage, muscle, liver, kidney, skin, or specialised cells such as placental, amnionic, chorionic or foetal cells, stem cells, chondrocytes, or reprogrammed cells from other parts of the body such as adipocytes reprogrammed to become cartilage cells.

15. (ORIGINAL) A tissue scaffold according to claim 1, in which the matrix further comprises one or more factors useful for the promotion of tissue growth and development.

16. (ORIGINAL) A tissue scaffold according to claim 15, wherein the factors in the matrix comprise epidermal growth factor, platelet derived growth factor, basic fibroblast growth factor, vascular endothelial growth factor, insulin-like growth factor, nerve growth factor, hepatocyte growth factor, transforming growth factors and bone morphogenic proteins, cytokines including interferons, interleukins, monocyte chemotactic protein-1(MCP-1), oestrogen, testosterone, kinases, chemokines, glucose or other sugars, amino acids, calcification factors, dopamine, amine-rich oligopeptides, such as heparin binding domains found in adhesion proteins such as fibronectin and laminin, other amines tamoxifen, cis-platin, peptides and certain toxoids.

17. (ORIGINAL) A tissue scaffold according to claim 1, in which the matrix further comprises drugs, hormones, enzymes, antibiotics, nutrients or other therapeutic agents or factors or mixtures thereof in both the first phase and the second phase.

18. (ORIGINAL) A tissue scaffold according to claim 1, in which each of the first phase and the second phase of the matrix comprises different drugs, hormones, enzymes, antibiotics, nutrients or other therapeutic agents or factors or mixtures thereof.

19. – 33. (cancelled)